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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,711	07/10/2003	She Shun Zhang	03-100	2619

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EXAMINER

BOES, TERENCE

ART UNIT PAPER NUMBER

3682

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/616,711	Applicant(s) ZHANG, SHE SHUN	
	Examiner Terence Boes	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - The recitation "...a hexagon hole 14 for accepting a Philips screw head..." appears to be a typo
 - The recitation "...bearing 8 may not have cylindrical contour but may have an ovular or unsymmetrical cross section" would render the bearing inoperative as this would inhibit rotation.

Appropriate correction is required.

Drawings

2. The drawings are objected to because:
 - Line 2-2 in Figure 1 is not shown
 - Reference characters 2,4 in Figure 1 are unclear
 - In Figure 1 the "worm gear" (7) does not have helical teeth.
 - Regarding claim 4, the drawings do not appear to show "said second shoulder rest[ing] against an outer wall of said slot."

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

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number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1,3,4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "about" in claim 1 is a relative term which renders the claim indefinite. The term "about" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Regarding claim 3, the term "inner wall" is indefinite. The claim language does not define what makes a wall an inner wall versus an outer wall. No frame of reference has been established.

Regarding claim 4, the term "outer wall" is indefinite. The claim language does not define what makes a wall an outer wall versus an inner wall. No frame of reference has been established.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winner USP 5802913 in view of McClearen.

Winner discloses:

- A housing (10) having a bore (11 @ 102)
- Closed inner end (See Fig. 5 @ 102)
- Bearing (22) having a smooth end, first and second walls forming first and second shoulders (see Fig. 1)
- Slot (see Fig. 5 between housing members 11 and 12) located about said second wall and extending part of the length of said housing (10)

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- Operator arm (13) disposed therein
- First wall (Fig. 1 top portion of 22) with smaller diameter than second wall (Fig. 1 lower portion of 22).
- First shoulder (102) rests against an inner wall (11) of slot (see Fig. 5).
- Second shoulder (lower portion of 22) rests against an outer wall (12) of slot (See Fig. 5)
- First wall has a round corner (shaft is round and has corner therefore has a "rounded corner")
- Operator arm (13) has a head part containing a gear section (34), gear section communicable with a crank operator (101)
- Crank operator (101) having a worm gear (14) positioned to communicate with operator arm gear section (34)
- Housing (10) included a base (18), substantially flat with a lower portion on one end.

Winner does not disclose:

- Bore with outer threaded end
- Bearing with an opposite threaded end threaded into said threaded end

McClearen teaches a bore (see Fig. 5 bore through 28) with an outer threaded end for the purpose of providing a novel means whereby a closure, such as a window or door, may be operated easily (P1/L1-3), and for the purpose of providing replaceable wear components as is well known by those normally skilled in the art.

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It would have been obvious to one having ordinary skill in the art at the time of the invention to provide the device disclosed by Winner with a bore with an outer threaded end to provide a novel means whereby a closure, such as a window or door, may be operated easily), and for the purpose of providing replaceable wear components as is well known by those normally skilled in the art.

McClearen teaches a bearing (29) with an opposite threaded end threaded into said threaded end [of bore] to mount one end of an arm (P2/C2/L1,2).

It would have been obvious to one having ordinary skill in the art at the time of the invention to have provided a bearing with an opposite threaded end threaded into said threaded end of bore to mount one end of an arm.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Particularly, USP 5,678,944 discloses a rounded corner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terence Boes whose telephone number is (571) 272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TB
2/27/06

A handwritten signature in black ink, appearing to read "Richard Ridley", is positioned above the printed name and title.

RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER